

Determining the magnitude of impact is dependent on an understanding of the potential directionality of social impacts. The analysis has not yet been done to more definitively define either the magnitude or directionality of impacts. Nevertheless, general responses to this management measure are likely to occur and may have either a neutral or positive impacts for category C and D permit holders (who simultaneously hold either a scallop or multispecies permit). If vessels currently use most DAS allocation in either the groundfish or scallop fisheries additional DAS allocated specifically for monkfish could be beneficial. This would increase income potential and/or mitigate the impacts of decreased income due to more stringent regulation in other fisheries. Scallop vessels are most likely to benefit from the separation of DAS.

## **6.5.2 Discussion of Social Impacts of the alternatives**

### **6.5.2.1 Separation of DAS**

#### **6.5.2.1.1 Separation of DAS Alternative 1**

Separation of DAS would not make vessels worse off than they would be under the No Action because vessels will have the opportunity to choose to have separated DAS or to fish under current regulations. Vessels would have the ability to fish either: 1) groundfish or scallop-only DAS, 2) monkfish-only DAS, or 3) a combined DAS. The economic and hence social impacts of either alternative 1a or 1b are likely to be positive or neutral relative to the No Action alternative, although some negative impacts could result from specific elements, as discussed below.

#### **6.5.2.1.2 Separation of DAS Alternative 2 (no action)**

As this alternative would keep the present system intact, no social impacts are anticipated.

#### **6.5.2.1.3 Separation of DAS Alternative 1a (Area based)**

A declaration to separate DAS usage requirements would be required annually for the SFMA only. For those fishing exclusively in the NFMA, alternative 1a would be the same as the No Action. This alternative provides an opportunity to increase the total number of DAS used in groundfish and monkfish fisheries combined. This is an advantage for the SFMA where Category C and D vessels currently target monkfish and have to use a multispecies DAS. This alternative would result in more options or flexibility that may enhance profitability. For vessels that fish exclusively in the NFMA, the economic and hence social impact effect of this alternative would be the same relative to the No Action. For vessels that fish in both areas, vessels that do not choose to have separated DAS would fish under the No Action rules which would have not economic or social impact.

#### **6.5.2.1.4 Separation of DAS Alternative 1b (Annual declaration)**

As with Alternative 1a, impacts are largely positive in the SFMA where Category C and D vessels would be able to direct on monkfish without having to use a multispecies DAS. This alternative may similarly benefit gillnet vessels in the NFMA, where an exempted monkfish fishery is already established, but would require a trawl exempted fishery to be

established for any benefit to accrue to monkfish trawl vessels in the NFMA. In both areas, vessels could elect to fish on combined DAS on a trip-by-trip basis. Because of the added flexibility, this alternative is likely to have positive social impacts for vessels fishing in either area. If the separation of DAS results in effort exceeding the maximum sustainable level under the rebuilding program, trip limits and allowable DAS could be reduced, resulting in some negative social effect on communities more dependent on the monkfish fishery, but whether this would occur cannot be predicted (especially since most vessels are not currently using more than half of their DAS allocations).

#### **6.5.2.1.5 Fleet vs. Individual DAS allocations**

If DAS are separated, monkfish DAS could be allocated as Fleet DAS (Alternative 1 Option 1a, equal number to all permit holders), or as Individual DAS (Alternative 1 Option 1b, based on past performance in the monkfish fishery). Vessels are currently allocated Fleet DAS, and this is the MAFMC's preferred alternative (the NEFMC did not identify a preferred alternative). Fleet DAS allocations inherently include some quantity of latent, or unused DAS (about half in the overall monkfish fishery) which could present an effort control problem if DAS leasing or transfer is allowed without appropriate controls to minimize the activation of such latent effort, especially during the stock-rebuilding period. On the other hand, Individual DAS allocations would minimize the amount of latent effort since the allocations would be based on actual vessel activity during the baseline period.

In terms of the social impact of the alternatives, Fleet DAS represent the least change from the current system, adjustments for DAS leasing/transfer notwithstanding, but also result in greater uncertainty about future allocations due to the potential for latent effort to be activated. In that sense, the impacts would be neutral to negative. On the other hand, latent effort represents a no-cost opportunity for vessels to increase monkfish effort as stocks rebuild to the point where some additional effort could be sustained. This provides the greatest opportunity for communities more dependent on the monkfish fishery.

Individual DAS, which are based on actual monkfish effort during a baseline period, would result in a minimal amount of latent effort being allocated to the vessels. Initial allocations, however, could be controversial, if the baseline period predates the FMP, prior to which some vessels were not required to report fishing effort or landings because they did not have federal fishing permits. While an individual DAS allocation system may favor communities where vessels were active in the fishery during the baseline period, it could be negative for those communities where vessels are permitted in the fishery but were not active during the period used to establish initial allocations.

Alternatives under consideration for transfer of DAS (by lease or sale) could have an effect on the choice between fleet or individual DAS programs. If an individual DAS program is adopted, the problems associated with leasing or transfer of latent effort are minimized since allocated effort would be similar in magnitude to actual effort used. The latent effort issue associated with fleet DAS, however, may also be mitigated by the conservation tax provisions of the transferability options.

#### **6.5.2.1.6 Implement transferable monkfish only DAS in this amendment or as a frameworkable action**

Alternative 1 Option 2a would implement transferable DAS (by lease or sale) as part of this amendment (effective May, 2005) while Option 2b would enable the Councils to implement such a program at a future date under the framework adjustment procedure. The latter is the Councils' preferred alternative, primarily due to uncertainty about the impact of taking such action and about the outcome of similar provisions proposed in Amendment 13 to the Multispecies FMP. Part of this uncertainty is due to the Councils no knowing whether they will adopt a Fleet or Individual DAS allocation system under the separated monkfish DAS alternative, if adopted. If Fleet DAS are adopted, there are questions remaining about the potential for activation of latent (unused) effort and its impact on the rebuilding program.

Leasing and sale provisions would provide the most flexibility to vessels, enabling those who wanted to expand their participation in the fishery to do so, while providing some economic return to those vessels that want to reduce or eliminate their monkfishing activities. Under a leasing program, the leasing vessel would still retain the long-term rights (and DAS allocations), and these impacts are likely to be less pronounced than under a sale provision, where the transfer of DAS is permanent. While sale of DAS may provide an economic return to selling vessel owners, the impact of departure from the fishery on crew and other members of the community are uncertain.

On the other hand, having the ability to increase monkfishing activity through the purchase or leasing of DAS provides the acquiring vessel greater flexibility and opportunity to tailor its monkfishing activity to the level best suited to its needs. Thus, those communities where acquiring vessels operate (and crew on such vessels) would realize a positive effect of the transfer program. Since these programs have not been effectively implemented in fisheries in this region, however, the actual impact cannot be accurately predicted, nor can the net social impact of crew and community benefits (of acquiring vessels) compared to losses (of selling vessels' crew and communities). This uncertainty and other potential issues that have been raised about DAS transfer programs suggest that postponing the adoption of a leasing program until a future date (through a framework adjustment) would have less negative social impacts that if it were adopted upon implementation of this amendment. This rationale is also the basis for the Councils' preference to adopt transferability under a future framework adjustment procedure.

#### **6.5.2.1.7 Lease or Sale of monkfish only DAS**

As discussed in the previous paragraphs, the Councils are considering allowing vessels to lease or sell DAS if monkfish DAS are separated, as noted above either by framework adjustment at a future time, or upon implementation of this amendment. These programs are modeled after similar programs proposed by the NEFMC in Amendment 13 to the Multispecies FMP. A quantitative analysis of the social impacts of these alternatives is not possible at this time, but a qualitative assessment based on the discussion in Amendment 13 is provided below.

The rationale for the DAS program in Amendment 13 is to provide flexibility for fishermen to adapt to the proposed DAS reductions that may make some vessels unprofitable. Similarly, the DAS sale provisions are designed to provide economic opportunity and flexibility while achieving some long-term reduction in fishing effort through the removal of active and inactive effort (via the conservation tax). While Amendment 2 does not contain either effort reduction proposals or the goal of long-term effort reduction that are integral to Amendment 13, the leasing and sale alternatives may still provide fishermen the opportunity and flexibility that those programs represent.

The Amendment 13 analysis concluded that “a leasing program offers an option for some vessels to temporarily increase the number of DAS they may fish by leasing the DAS from another vessel that chooses not to fish them. ... If a particular community is home to a large number of vessels that can participate, this program may provide for the sustained participation of the community in the groundfish [or monkfish, in this case] fishery.” The analysis also noted that “the selection of a mechanism to ensure conservation-equivalency is important and may determine the extent to which some vessels are able to participate in the DAS leasing program.”

From Amendment 13:

The following gives some indication of the possible social impacts from leasing DAS. This analysis is based on part on the predicted outcomes from economic modeling ... further aggregated by port, state, and vessel size to give an indication of the differential effects of DAS leasing within the groundfish industry. This analysis should be interpreted as an indication of the *direction* of pressures or trends, rather than a precise estimate of impacts. The economic model itself is highly stylized and makes a number of theoretical assumptions about perfect markets (such as the overall ability and willingness to trade and the full information to do so, and simultaneous execution of all trades) that are not reasonably expected to occur. There are also a number of reasons to expect, based on anthropological perspectives, that such trading will not take place as economic modeling may predict. Anthropological studies have demonstrated repeatedly that for many fishermen and fishing families, a commitment to fishing is based not solely on income or profit maximization but rather on fishing as a way of life.... Other studies have shown that many fishing businesses are family-run enterprises where income pooling and other forms of resource sharing mitigate against the more traditionally-capitalist assumptions about firms in economic analyses.

The economic modeling assumes that a vessel owner would only lease DAS if the income from leasing is more than the expected income from fishing those DAS; in other words, the impacts from such a leasing arrangement are expected to be positive, or at least no worse than status quo. Given the coupling of this alternative with other alternatives in order to meet conservation neutrality, leasing would at best mitigate the negative impacts from the overall reduction in fishing activity. However, since the income accrues to the owner of the vessel, crew members on vessels that lease DAS away may see a negative impact to income, depending on to what extent the vessel engages in alternative fishing activities

(about which the model makes no predictions). Alternatively, crew on vessels that lease DAS in may see positive impacts from increased fishing activity. Changes in landing patterns that could occur with net outflows of DAS from particular ports (as indicated below) could have negative impacts on buyers and processors, depending again on to what extent vessels engage in other fishing activities. Moreover, the social impacts from policy changes extend beyond changes in income. Studies on the social ramifications of ITQ's (though fundamentally different from the policy proposed here since DAS are only leased and not permanently sold) have, for example, pointed to the significant impacts on social relations that stem from the commodification of fishing activity. Moreover, such ITQ studies have pointed to the ramifications of changing market shares that enable the domination of particular segments of the industry over others without further protective legislation.

In terms of the distributional effects within the groundfish industry, the economic modeling indicates a movement of DAS from large/medium to small vessels.... For all size categories, there is a movement to vessels more dependent on groundfish income, though this is more pronounced for the larger vessels. At the state level ..., the influx of DAS is primarily to Massachusetts, which is also the state with the highest groundfish income from the vessels modeled. Maine, though with the second highest income and with income that comes from vessels dependent or highly dependent on groundfish, sees significant loss of DAS. Rhode Island also shows significant loss of DAS. It is therefore expected that the negative impacts (as detailed above) from DAS leasing would be felt most there. At the port level, ports such as New Bedford and Gloucester see a net gain of DAS while ports such as Portland, Point Judith, Newport, and Hampton might see a net loss. (*Amendment 13, Section 5.6.2.2.2*)

In the context of the monkfish fishery, therefore, DAS leasing is likely to result in the shift in distribution of DAS used in the fishery among communities and vessel classes, but the magnitude and direction cannot be predicted. Under a DAS sale program, similar changes would also likely occur, but on a more permanent basis. It is unclear at this time whether the multispecies DAS transfer provision that requires a selling vessel to relinquish its other federal permits would preclude such a vessel from simultaneously selling its monkfish DAS if Transferable DAS Option 3 is adopted.

### **6.5.2.2 Incidental catch Alternatives**

#### **6.5.2.2.1 Incidental catch Alternative 1 (no action)**

As this alternative would keep the present system intact, no social impacts are anticipated.

#### **6.5.2.2.2 Incidental catch Alternative 2 - 50 lbs. (tails) per day/ 150 lbs. max.**

The proposed alternative represent a potential improvement in profitability for smaller vessels due to increased trip limits for incidental catch. This may result in positive social

outcomes (e.g., profit and decreased discards) for some small-mesh vessels that take trips longer than one day.

#### **6.5.2.2.3 Incidental catch Alternative 3 - 50 lbs. (tails) per day/ 500 lbs. max.**

This alternative increases the maximum amount of monkfish that can be retained over either alternative 2. This may result in positive social outcomes (e.g., increased profit and decreased discards) for some vessels, particularly squid freezer vessels that take trips of 3-10 days in duration.

#### **6.5.2.3 General Category scallop dredge and clam dredge incidental limit –**

##### **6.5.2.3.1 General Category scallop dredge/clam dredge incidental limit – Alternative 1 (no action)**

This alternative prohibits the possession of monkfish. As this alternative would keep the present system intact, no social impacts are anticipated.

##### **6.5.2.3.2 General Category scallop dredge and clam dredge incidental limit – Alternative 2**

The alternative changes the incidental catch rate from zero to levels under consideration for general incidental catch limits. This improves the profitability for vessels equipped with scallop and clam dredge gear and decreases discarding, both of which have positive social impacts.

#### **6.5.2.4 Incidental catch limit on vessels west of 72 30° N**

##### **6.5.2.4.1 Incidental catch limit on vessels west of 72 30° N Alternative 1 (no action)**

This alternative reflects trip limit weight reductions mandated in the multispecies interim rule and in Amendment 13. As this alternative would keep the present system intact, no further social impacts are anticipated.

##### **6.5.2.4.2 Incidental catch limit on vessels west of 72 30° N Alternative 2**

This alternative provides an opportunity for vessels involved in the summer flounder fishery to fish in some affected areas. This would result in improved profitability and thus positive economic and social outcomes.

#### **6.5.2.5 Minimum mesh size**

As noted in Section 6.4.5, the preferred alternative would have no negative economic impacts since it would not change minimum mesh size restrictions for vessels fishing under a monkfish DAS. Similarly, the preferred alternative will not have any negative social impacts. However, the implementation of an alternative that would increase the minimum trawl mesh size in the codend or entire net would require owners of monkfish trawl vessels with non-conforming gear to purchase and install trawl nets that comply with the new restrictions. While replacing an entire net may require a substantial initial expenditure, vessels routinely replace codends. The cost of gear may be offset by the benefits of increased fishing opportunity and increased yield per recruit associated with using larger mesh nets.

Vessels that fish only in the NFMA would likely not be impacted by a change in the minimum mesh size since there is currently monkfish trawl exemption area in the NFMA. As a result, these vessels would likely continue to fish for monkfish under a multispecies DAS, or under a combined multispecies/monkfish DAS, with minimum mesh regulated by the multispecies FMP. However, there is an option under the minimum mesh alternatives to require the increased minimum mesh size under combined DAS. If this option is implemented, vessels that choose to fish under a combined DAS (to retain full monkfish allowance if DAS are separated) in the NFMA would also be required to purchase trawl mesh that conforms to the increased minimum monkfish mesh size.

In summary, the preferred alternative would result in no additional costs, and therefore, would likely not have any significant negative social impacts. However, an increase to the minimum mesh size (codend or entire net) would result in additional costs to vessels using non-conforming gear, resulting in some negative social impacts. However, there is insufficient data available on the mesh size being used by vessels targeting monkfish (from observer data and VTR data) to determine the extent of these impacts. Furthermore, the increased yield per recruit, reduced discards of small monkfish and other species, and the increased opportunity (associated with separated DAS) may actually result in positive social effects despite the short term economic costs.

#### **6.5.2.6 Minimum fish size**

##### **6.5.2.6.1 Minimum fish size Alternative 1 (no action)**

The existing minimum fish size in both areas would remain the same resulting in no social impacts.

##### **6.5.2.6.2 Minimum fish size Alternative 2 (uniform size in both areas)**

This alternative would result in the same minimum fish size in both management areas. It would have no social impacts in the NFMA as the size would remain the same. However economic opportunities in the SFMA would be increased by the reduction in minimum fish size in that area. Reducing fish size would also reduce discarding in the SFMA. The social impacts of the alternative are either neutral or positive.

##### **6.5.2.6.3 Minimum fish size Alternative 3 (no minimum size)**

This alternative would eliminate the minimum fish size limit resulting in the greatest potential economic flexibility and would eliminate regulatory discards due to minimum size restrictions. The social impacts of the alternative are either neutral or positive.

##### **6.5.2.6.4 Minimum fish size Alternative 4 (if DAS are separated, 14" tail/21" whole)**

As the size limit proposed in this alternative would be the same as current regulations for the SFMA the vessels fishing in the SFMA would not be affected. For the NFMA, this alternative represents an increase in minimum fish size that may result in reduced economic opportunities. The social impacts for this alternative may be neutral for the SFMA and negative for the NFMA.

### **6.5.2.7 Closed Season/Time out of the fishery**

Alternative 1 (no action) would retain the current requirement for limited access Category A and B vessels to take a 20-day block of time out of the monkfish fishery from April 1 through June 30 of each calendar year. Limited access Category C and D vessels are currently not required to take a monkfish spawning block since they are required to take a 20-day block out of the Northeast multispecies fishery from March 1 through May 31 of each calendar year, if they hold a limited access Northeast multispecies permit. This alternative would not incur any additional regulatory costs since it does not change the current monkfish spawning block requirements. As such, this alternative would likely not incur any additional social impacts.

Alternative 2 would eliminate the requirement for limited access monkfish vessels to take a 20-day block of time out of the monkfish fishery. This alternative would provide limited access Category A and B vessels with more opportunity to utilize their monkfish DAS. Thus, this alternative would provide these vessels with more flexibility to fish for monkfish when it is most economically beneficial, resulting in some social benefits to this sector of the directed monkfish fishery. As stated in Section 6.4.7, under existing regulations, owners of limited access Category A and B vessels may choose the 20-day block that is most advantageous. Thus, this alternative may not be as socially and economically beneficial as expected. Due to the lack of information concerning this management measure, the Councils are soliciting public input on the social impacts of all the closed season alternatives.

Alternative 3 would increase the current 20-day spawning block to 40 days. Under this alternative, vessel owners may choose to take the entire 40-day block at one time, or split it into two 20-day blocks. As stated in Section 6.4.7, this alternative would greatly impact monkfish trip scheduling and planning, leaving vessels with few opportunities to target monkfish during one of the peak monkfish fishing seasons. The social and economic impacts of blocks of time out of the fishery are difficult to determine since vessels may engage in other fisheries while under a monkfish spawning block, and may retain monkfish within the bycatch limits established for fishery or gear type. However, because this alternative further restricts limited access monkfish vessels during one of the peak fishing seasons, Alternative 3 is expected to have greater social impacts than Alternative 1.

Under this management measure, there is an option to require all limited access monkfish vessels in the spawning season restrictions under either Alternative 1 or Alternative 3 if DAS are separated. Currently, limited access Category C and D vessels are not required to take a monkfish spawning block. Category C and D vessels with a limited access multispecies permit are required to take a 20-days out of the Northeast multispecies fishery, but Category C and D vessels with a limited access scallop permit are currently not required to take type of spring spawning block. The option to include all limited access monkfish vessels in the spawning season restrictions may reduce social tensions between owners of Category A and B vessels and owners of Category C and D vessels resulting from feelings that Category C and D vessels have been given an unfair advantage. As discussed in Section 6.4.7, scallop vessels are unlikely to target monkfish

during the spring since this is the start of the scallop fishing year. As a result, the social impacts to limited access scallop/monkfish vessels resulting from Alternatives 1 or 3 would likely be minimal. Furthermore, limited access Category C and D vessels with a limited access multispecies permit are not expected to incur additional social costs under this option, since these vessels are currently not able to fish under a monkfish DAS during their 20-day multispecies spawning block.

#### **6.5.2.8 Offshore SFMA Fishery**

##### **6.5.2.8.1 Offshore SFMA Fishery Alternative 1 (no action)**

This alternative would continue the negative impact of the original FMP rules that resulted in the offshore fishery being unprofitable for larger vessels, due to the trip limit and opportunity cost (in the form of a required multispecies DAS being used). Vessels and communities that had benefited from the offshore fishery prior to the FMP would still be unable to realize those benefits under the current (no action) rules, although separation of DAS could make the fishery profitable for some vessels.

##### **6.5.2.8.2 Offshore SFMA Fishery Alternative 2**

Vessels enrolled in this program would be able to increase the amount of monkfish harvested per DAS resulting in greater profitability. However, increased profits for some vessels may be tempered by the requisite cost of VMS installation. Larger vessels are more likely to benefit given the distance to fishing grounds. The social benefits for this alternative are likely to be positive. This alternative benefits larger trawl vessels by allowing them to return to a level of participation in practice prior to FMP implementation, having positive economic and social consequences for vessels in this size category.

#### **6.5.2.9 Modification of permit qualification criteria**

##### **6.5.2.9.1 Modification of permit qualification criteria Alternative 1**

The estimated number of new permits resulting from the adoption of this alternative is 7. The greatest amount of social benefit will accrue should this alternative be adopted.

##### **6.5.2.9.2 Modification of permit qualification criteria Alternative 2**

The estimated number of new permits resulting from the adoption of this alternative is 3. The social benefits for this alternative are likely to be positive for those affected.

##### **6.5.2.9.3 Modification of permit qualification criteria Alternative 3**

The estimated number of new permits resulting from the adoption of this alternative is 5. The social benefits for this alternative are likely to be positive for those affected.

##### **6.5.2.9.4 Modification of permit qualification criteria Alternative 4**

The estimated number of new permits resulting from the adoption of this alternative is 3. The social benefits for this alternative are likely to be positive for those affected.

##### **6.5.2.9.5 Modification of permit qualification criteria Alternative 5 (no action)**

The estimated number of new permits resulting from the adoption of this alternative is 0. There would be no new social benefits resulting from the adoption of this alternative.

#### **6.5.2.10 NAFO Area Exemption**

The preferred alternative for the NAFO regulated area exemption program would relieve vessels holding a High Seas Fishing Compliance Permit from the regulations governing the monkfish fishery within the U.S. EEZ. Under this program participating vessels must comply with NAFO regulations, and store their gear accordingly when transiting the U.S. EEZ. The preferred alternative will provide vessels with greater flexibility than the no action alternative. However, the social impacts of this program are uncertain since it is unknown how many vessels will participate in this program. At total of 72 vessels have been issued a High Seas Compliance Permit since the inception of this permit. Therefore, this would likely be the maximum number of vessels to take advantage of such a program in the monkfish fishery.

#### **6.5.2.11 Alternatives to minimize fishery effects on EFH**

##### **6.5.2.11.1 EFH Alternative 1 (no action)**

There would be no short-term social impacts resulting from the adoption of this alternative. Should a link between habitat and productivity be established long-term negative impacts might be realized.

##### **6.5.2.11.2 EFH Alternative 2**

There would be no short-term social impacts resulting from the adoption of this alternative. Should a link between habitat and productivity be established long-term negative impacts might be realized.

##### **6.5.2.11.3 EFH Alternative 3**

It is not possible to estimate the potential social impacts of this alternative since neither Multispecies Amendment 13 nor Scallop Amendment 10 have been implemented. Further no specific estimates of the impact of these amendments on the monkfish fishery have been conducted. Social impacts are indeterminate. NMFS seeks input from industry on potential impacts.

##### **6.5.2.11.4 EFH Alternative 4 – Trawl configuration Option 2**

This alternative requires the purchase of new equipment for monkfish only DAS trips. Some vessel owners may consider this a hardship in a climate of shrinking profitability margins.

##### **6.5.2.11.5 EFH Alternative 5ab**

Based on 2001 VTR data only 3 trips were identified as having taken place within the Oceanographer Canyon Closure area, all reported using trawl gear, and were not directed trips. For the same year 1 non-directed trip was reported as having taken place within the Lydonia Canyon Closure area. The combined revenue from these trips was estimated to be \$68 thousand. The social impacts resulting from the closure of these areas are likely to be small.

#### **6.5.2.11.6 EFH Alternative 5c**

Based on 2001 VTR data only 116 trips were identified as having taken place within the Large, Steep-Walled Canyon Closures of which 5 were found to be directed trips. The estimated value was \$1.2 million. The majority of non-directed trips were targeting squid or whiting while the remaining directed trips were for summer flounder. The combined affect of option 1 and option 2 was estimated to affect 3 trawl trips and 2 gillnet trips with an estimated value of \$52 thousand. One trip for each of the 5 vessels would be affected. The social impacts resulting from the closure of this area is likely to be small.

#### **6.5.2.12 Cooperative Research Incentive Alternatives**

Alternative 1 (DAS set-aside) and Alternative 2 (DAS exemption) would provide a means for streamlining the experimental fishing permit process for individuals interested in conducting monkfish related cooperative research activities outside the monkfish DAS program. Currently, researchers must provide information on the impacts of conducting their research activity outside the monkfish DAS program. However, Alternatives 1 and 2 provide a means for analyzing the impacts associated with this additional monkfish effort up front, reducing the administrative burden on the researcher. Thus, because Alternatives 1 and 2 would reduce some of the administrative burden associated with conducting cooperative monkfish research activities, it could increase the incentive for individuals to conduct monkfish related research. The products of these research activities, such as bycatch reduction devices or improved information on the monkfish resource, would likely improve the management of the monkfish fishery, resulting in some social benefits.

In terms of impacts on individual monkfish fishing effort, Alternative 1 would spread the research set-aside across all limited access vessels, impacting all vessels equally. In fact, the proposed set-aside amounts of 50 DAS, 100 DAS, 200 DAS, and 500 DAS, would result in limited access vessels giving up less than 1 monkfish DAS. Thus, the social impacts of a DAS set-aside related to reductions in fishing opportunity are expected to be negligible. Conversely, the vessels involved in the cooperative research activity would obtain social and economic benefits resulting from the additional fishing opportunities. Furthermore, the application for a DAS set-aside would be a competitive process similar to the research set-aside program (RSA) established for many fisheries managed by the Mid-Atlantic Fishery Management Council. Although this process may be more equitable than the DAS exemption procedures, it elicits the additional burden of the NOAA Grants process, which may be very cumbersome and time-consuming.

Unlike Alternative 1, Alternative 2 would not impact the fishing opportunities of individual vessels since the number of DAS that would be available for monkfish related research would be in addition to the total number of DAS allocated to the directed monkfish fishery. Thus, there would be no additional social impacts resulting from reductions in fishing opportunities under this alternative. Similar to Alternative 1, vessels participating in monkfish research activities under a DAS exemption would obtain both social and economic benefits resulting from the additional fishing opportunities. However, unlike the DAS set-aside alternative, this alternative would not be a competitive process. Requests for DAS exemptions would be reviewed and issued on a

first come/first serve basis. Therefore, the DAS exemption process may be less equitable than the DAS set-aside procedures, especially for monkfish research activities that are scheduled to occur later in the fishing year.

#### **6.5.2.13 Vessel upgrading baseline**

The preferred alternative to align the vessel baseline specifications for a vessel's limited access monkfish vessel with that vessel's first Federal limited access permit would only impact those limited access monkfish vessels that have more than one baseline upon which an upgrade in size, tonnage, and horsepower can be based. For example, several limited access multispecies permit holders transferred their permits to another vessel prior to the implementation of the Monkfish FMP. As a result, their new vessel qualified for a limited access monkfish permit. Therefore, under existing regulations, the baseline vessel for the limited access monkfish permit, while the old vessel is the baseline vessel for the limited access multispecies permit.

As noted in Section 6.4.13, a change in a vessel's monkfish baseline could either reduce or increase the value of the vessel depending on whether the monkfish baseline is smaller or larger than the first limited access permit held by the vessel, resulting in either positive or negative social impacts. The no action alternative could also reduce the value of a limited access monkfish vessel if the vessel owner has to relinquish one of its limited access Federal permits (i.e., monkfish or multispecies) in order to upgrade the vessel within the established restrictions. Therefore, both the preferred alternative and the no action alternative could result in some negative social impacts, but the preferred alternative is likely to have some positive social impact.

The magnitude of these impacts is difficult to estimate since it is difficult to determine the number of vessels that are currently restricted by the existing vessel baseline provisions, and the number of vessels that may benefit from the preferred alternative. Furthermore, the preferred alternative only addresses multiple baselines with respect to the monkfish fishery. Although the preferred alternative would align a vessel's monkfish baseline with the baseline for its first Federal limited access permit, a vessel could have a baseline for another limited access fishery that is not affected by this action (i.e., summer flounder, tilefish, red crab, etc.) Thus, any positive impacts related to the preferred alternative could be negated if the vessel has an additional baseline for another fishery not affected by this action. Finally, a change to a monkfish vessel's baseline under the preferred alternative could also impact the ability of a vessel to lease or transfer DAS if these programs are implemented in the monkfish fishery.

#### **6.5.2.14 Monkfish trawl experimental fishery**

##### **6.5.2.14.1 Monkfish trawl experimental fishery Alternative 1 (no action)**

Because there is no exempted fishery in the NFMA, there would be no opportunity for vessels to use monkfish-only DAS in this area. The separation of monkfish and groundfish DAS would result in no benefits. Therefore there would be no social impacts to trawl vessels in this area.

##### **6.5.2.14.2 Monkfish trawl experimental fishery Alternative 2**

This alternative would establish an experimental fishery that would allow vessels to retain both monkfish and groundfish harvests when participating in experiments. This increases economic opportunities for those participating in the experiment. If the experiment is found successful, this would increase the number of trawl vessel fishing opportunities. Social impacts for this alternative are likely to be positive.

#### **6.5.2.15 Fishing year**

At this time, Amendment 13 to the Northeast Multispecies FMP will not change the multispecies fishing year. Therefore, the preferred alternative to retain the current monkfish fishing year would not result in any social impacts. However, the three alternatives to change the fishing year would likely result in some level of social impacts since the monkfish fishing year would no longer be aligned with the multispecies fishing year, potentially making the permit renewal process more cumbersome. In addition, a change in the fishing year would impact a vessel owner's planning of fishing activities for the upcoming year, especially if a vessel is receiving different DAS allocations at different times of the year. These impacts would be more substantial if monkfish DAS are not separated from Northeast multispecies and scallop DAS. Furthermore, the social impacts associated with Alternative 2 may be slightly less than Alternatives 3 and 4 since Alternative 2 would align the monkfish fishing year with the fishing years of several other species managed by the Mid-Atlantic Fishery Management Council (i.e., summer flounder, scup, black sea bass, squid, etc.), making the planning of fishing activities slightly easier.

#### **6.5.2.16 Prorating DAS (under change of fishing year alternatives)**

This management measure would only be necessary if the Councils adopt a change in the monkfish fishing year under this amendment. The Councils are considering two alternatives for prorating DAS. The only difference between the alternatives is that Alternative 2 provides for a longer transition period by extending the proration period into the 2006 fishing year. As a result, Alternative 2 may provide vessels with greater flexibility to maximize their economic opportunity. Therefore, Alternative 2 may have a slight advantage from a social impact perspective than Alternative 1 due to the increased flexibility.

#### **6.5.2.17 Framework adjustment provisions**

The Councils are proposing to add measures to protect sea turtles and other species protected under the Endangered Species and/or Marine Mammal Protection Act, and measures to implement bycatch reduction devices to the list of measures in the FMP that can be implemented through the framework adjustment process. Including these items in the list of framework measures is administrative in nature, and, therefore, will not result in any social impacts at this time. The social impacts associated with any protected species or bycatch reduction measures considered by the Councils in the future will be fully analyzed in the associated framework action.